

Mr. C. F. Schubert
Sistersville

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Attached is a copy of the latest Drinking Water Standard and implementation, which I copied from the BNA Environment Reporter Federal Regulations Book. I will check with Mr. Bess when he returns to see if there is additional information and if this is the correct standard.

Katy Wickline
Secretary

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ENVIRONMENTAL PROTECTION AGENCY NATIONAL INTERIM PRIMARY DRINKING WATER REGULATIONS

(40 CFR 141; 40 FR 59565, December 24, 1975; Amended by 41 FR 28402, July

9, 1976)

Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY

SUBCHAPTER D—WATER PROGRAMS

PART 141—NATIONAL INTERIM PRIMARY DRINKING WATER REGULATIONS

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AUTHORITY: Secs. 1412, 1414, 1445, and 1450 of the Public Health Service Act, 88 Stat. 1660 (42 U.S.C. 300g-1, 300g-3, 300j-4, and 300j-9).

Subpart A—General

§ 141.1 Applicability.

This part establishes primary drinking water regulations pursuant to section 1412 of the Public Health Service Act, as amended by the Safe Drinking Water Act (Pub. L. 93-523); and related regulations applicable to public water systems.

§ 141.2 Definitions.

As used in this part, the term:

(a) "Act" means the Public Health Service Act, as amended by the Safe Drinking Water Act, Pub. L. 93-523.

(b) "Contaminant" means any physical, chemical, biological, or radiological substance or matter in water.

(c) "Maximum contaminant level" means the maximum permissible level of a contaminant in water which is delivered to the free flowing outlet of the ultimate user of a public water system, except in the case of turbidity where the maximum permissible level is measured at the point of entry to the distribution system. Contaminants added to the water under circumstances controlled by the user, except those resulting from corrosion of piping and plumbing caused by water quality, are excluded from this definition.

(d) "Person" means an individual, corporation, company, association, partnership, State, municipality, or Federal agency.

(e) "Public water system" means a system for the provision to the public of piped water for human consumption, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year. Such term includes (1) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (2) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. A public water system is either a "community water system" or a "non-community water system."

(i) "Community water system" means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

(ii) "Non-community water system" means a public water system that is not a community water system.

(f) "Sanitary survey" means an on-site review of the water source, facilities, equipment, operation and maintenance of a public water system for the purpose of evaluating the adequacy of such source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water.

(g) "Standard sample" means the aliquot of finished drinking water that is examined for the presence of coliform bacteria.

(h) "State" means the agency of the State government which has jurisdiction over public water systems. During any period when a State does not have primary enforcement responsibility pursuant to Section 1413 of the Act, the term "State" means the Regional Administrator, U.S. Environmental Protection Agency.

(i) "Supplier of water" means any person who owns or operates a public water system.

(j) "Dose equivalent" means the product of the absorbed dose from ionizing radiation and such factors as account for differences in biological effectiveness due to the type of radiation and its distribution in the body as specified by the International Commission on Radiological Units and Measurements (ICRU).

(k) "Rem" means the unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system. A "millirem (mrem)" is 1/1000 of a rem.

(l) "Picocurie (pCi)" means that quantity of radioactive material producing 2.22 nuclear transformations per minute.

(m) "Gross alpha particle activity" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

(n) "Man-made beta particle and photon emitters" means all radionuclides emitting beta particles and/or photons listed in Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure, NBS Handbook 69, except the daughter products of thorium-232, uranium-235 and uranium-238.

(o) "Gross beta particle activity" means the total radioactivity due to beta particle emission as inferred from measurements on a dry sample.

[41 FR 28402, July 9, 1976]

§ 141.3 Coverage.

This part shall apply to each public water system, unless the public water system meets all of the following conditions:

(a) Consists only of distribution and storage facilities (and does not have any collection and treatment facilities);

(b) Obtains all of its water from, but is not owned or operated by, a public water system to which such regulations apply;

(c) Does not sell water to any person; and

(d) Is not a carrier which conveys passengers in interstate commerce.

§ 141.4 Variances and exemptions.

Variances or exemptions from certain provisions of these regulations may be granted pursuant to Sections 1415 and 1416 of the Act by the entity with primary enforcement responsibility. Provisions under Part 142, *National Interim Primary Drinking Water Regulations Implementation*—subpart E (Variances) and subpart F (Exemptions)—apply where EPA has primary enforcement responsibility.

§ 141.5 Siting requirements.

Before a person may enter into a financial commitment for or initiate construction of a new public water system or increase the capacity of an existing public water system, he shall notify the State and, to the extent practicable, avoid locating part or all of the new or expanded facility at a site which:

(a) Is subject to a significant risk from earthquakes, floods, fires or other disasters which could cause a breakdown of the public water system or a portion thereof; or

(b) Except for intake structures, is within the floodplain of a 100-year flood or is lower than any recorded high tide where appropriate records exist. The U.S. Environmental Protection Agency will not seek to override land use decisions affecting public water systems siting which are made at the State or local government levels.

§ 141.6 Effective date.

The regulations set forth in this part shall take effect 18 months after the date of promulgation.

Subpart B—Maximum Contaminant Levels

§ 141.11 Maximum contaminant levels for inorganic chemicals.

(a) The maximum contaminant level for nitrate is applicable to both community water systems and non-community water systems. The levels for the other inorganic chemicals apply only to community water systems. Compliance with maximum contaminant levels for inorganic chemicals is calculated pursuant to § 141.23.

(b) The following are the maximum contaminant levels for inorganic chemicals other than fluoride:

| Contaminant | Level, milligrams per liter |
|----------------|-----------------------------------|
| Arsenic | 0.05 |
| Barium | 1. |
| Cadmium | 0.010 |
| Chromium | 0.05 |
| Lead | 0.05 |
| Mercury | 0.002 |
| Nitrate (as N) | 10. |
| Selenium | 0.01 |
| Silver | 0.05 |

(c) When the annual average of the maximum daily air temperatures for the location in which the community water system is situated is the following, the maximum contaminant levels for fluoride are:

| Temperature Degrees Fahrenheit | Degrees Celsius | Level, milligrams per liter |
|--------------------------------------|-----------------|-----------------------------------|
| 53.7 and below | 12.0 and below | 2.4 |
| 53.8 to 58.3 | 12.1 to 14.6 | 2.2 |
| 58.4 to 63.8 | 14.7 to 17.6 | 2.0 |
| 63.9 to 70.6 | 17.7 to 21.4 | 1.8 |
| 70.7 to 79.2 | 21.5 to 26.2 | 1.6 |
| 79.3 to 90.5 | 26.3 to 32.5 | 1.4 |

§ 141.12 Maximum contaminant levels for organic chemicals.

The following are the maximum contaminant levels for organic chemicals. They apply only to community water systems. Compliance with maximum contaminant levels for organic chemicals is calculated pursuant to § 141.24.

| | Level, milligrams per liter |
|---|-----------------------------------|
| (a) Chlorinated hydrocarbons: | |
| Endrin (1,2,3,4,10, 10-hexachloro-6,7-epoxy-1,4, 4a,5,6,7,8,8a-octa-hydro-1,4-endo, endo-5,8 - di-methano naphthalene). | 0.0002 |
| Lindane (1,2,3,4,5,6-hexachloro-cyclohexane, gamma isomer). | 0.004 |
| Methoxychlor (1,1,1-Trichloro-2, 2 - bis [p-methoxyphenyl] ethane). | 0.1 |
| Toxaphene (C ₁₀ H ₁₀ Cl ₇ -Technical chlorinated camphene, 67-69 percent chlorine). | 0.005 |
| (b) Chlorophenoxys: | |
| 2,4 - D, (2,4-Dichlorophenoxyacetic acid). | 0.1 |
| 2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid). | 0.01 |

§ 141.13 Maximum contaminant levels for turbidity.

The maximum contaminant levels for turbidity are applicable to both community water systems and non-community water systems using surface water sources in whole or in part. The maximum contaminant levels for turbidity in drinking water, measured at a representative entry point(s) to the distribution system, are:

(a) One turbidity unit (TU), as determined by a monthly average pursuant to § 141.22, except that five or fewer turbidity units may be allowed if the supplier of water can demonstrate to the State that the higher turbidity does not do any of the following:

- (1) Interfere with disinfection;
- (2) Prevent maintenance of an effective disinfectant agent throughout the distribution system; or
- (3) Interfere with microbiological determinations.

(b) Five turbidity units based on an average for two consecutive days pursuant to § 141.22.

§ 141.14 Maximum microbiological contaminant levels.

The maximum contaminant levels for coliform bacteria, applicable to community water systems and non-community water systems, are as follows:

(a) When the membrane filter technique pursuant to § 141.21(a) is used, the number of coliform bacteria shall not exceed any of the following:

- (1) One per 100 milliliters as the arithmetic mean of all samples examined

per month pursuant to § 141.21 (b) or (c);

(2) Four per 100 milliliters in more than one sample when less than 20 are examined per month; or

(3) Four per 100 milliliters in more than five percent of the samples when 20 or more are examined per month.

(b) (1) When the fermentation tube method and 10 milliliter standard portions pursuant to § 141.21(a) are used, coliform bacteria shall not be present in any of the following:

(i) more than 10 percent of the portions in any month pursuant to § 141.21 (b) or (c);

(ii) three or more portions in more than one sample when less than 20 samples are examined per month; or

(iii) three or more portions in more than five percent of the samples when 20 or more samples are examined per month.

(2) When the fermentation tube method and 100 milliliter standard portions pursuant to § 141.21(a) are used, coliform bacteria shall not be present in any of the following:

(i) more than 60 percent of the portions in any month pursuant to § 141.21 (b) or (c);

(ii) five portions in more than one sample when less than five samples are examined per month; or

(iii) five portions in more than 20 percent of the samples when five or more samples are examined per month.

(c) For community or non-community systems that are required to sample at a rate of less than 4 per month, compliance with paragraphs (a), (b) (1), or (b) (2) of this section shall be based upon sampling during a 3 month period, except that, at the discretion of the State, compliance may be based upon sampling during a one-month period.

§ 141.15 Maximum contaminant levels for radium-226, radium-228, and gross alpha particle radioactivity in community water systems.

[41 FR 28402, July 9, 1976]

The following are the maximum contaminant levels for radium-226, radium-228, and gross alpha particle radioactivity:

(a) Combined radium-226 and radium-228—5 pCi/l.

(b) Gross alpha particle activity (including radium-226 but excluding radon and uranium)—15 pCi/l.

§ 141.16 Maximum contaminant levels for beta particle and photon radioactivity from man-made radionuclides in community water systems.

[41 FR 28402, July 9, 1976]

(a) The average annual concentration of beta particle and photon radioactivity from man-made radionuclides in drinking water shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirem/year.

(b) Except for the radionuclides listed in Table A, the concentration of man-made radionuclides causing 4 mrem total body or organ dose equivalents shall be

calculated on the basis of a 2 liter per day drinking water intake using the 168 hour data listed in "Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure," NBS Handbook 69 as amended August 1963, U.S. Department of Commerce. If two or more radionuclides are present, the sum of their annual dose equivalent to the total body or to any organ shall not exceed 4 millirem/year.

TABLE A.—Average annual concentrations assumed to produce a total body or organ dose of 4 mrem/yr

| Radionuclide | Critical organ | pCi per liter |
|--------------|----------------|---------------|
| Tritium | Total body | 20,000 |
| Strontium-90 | Bone marrow | 8 |

Subpart C—Monitoring and Analytical Requirements

§ 141.21 Microbiological contaminant sampling and analytical requirements.

(a) Suppliers of water for community water systems and non-community water systems shall analyze for coliform bacteria for the purpose of determining compliance with § 141.14. Analyses shall be conducted in accordance with the analytical recommendations set forth in "Standard Methods for the Examination of Water and Wastewater," American Public Health Association, 13th Edition, pp. 662-688, except that a standard sample size shall be employed. The standard sample used in the membrane filter procedure shall be 100 milliliters. The standard sample used in the 5 tube most probable number (MPN) procedure (fermentation tube method) shall be 5 times the standard portion. The standard portion is either 10 milliliters or 100 milliliters as described in § 141.14 (b) and (c). The samples shall be taken at points which are representative of the conditions within the distribution system.

(b) The supplier of water for a community water system shall take coliform density samples at regular time intervals, and in number proportionate to the population served by the system. In no event shall the frequency be less than as set forth below:

| Population served: | Minimum number of samples per month |
|--------------------|-------------------------------------|
| 25 to 1,000 | 1 |
| 1,001 to 2,500 | 2 |
| 2,501 to 3,300 | 3 |
| 3,301 to 4,100 | 4 |
| 4,101 to 4,900 | 5 |
| 4,901 to 5,800 | 6 |
| 5,801 to 6,700 | 7 |
| 6,701 to 7,600 | 8 |
| 7,601 to 8,500 | 9 |
| 8,501 to 9,400 | 10 |
| 9,401 to 10,300 | 11 |
| 10,301 to 11,100 | 12 |
| 11,101 to 12,000 | 13 |
| 12,001 to 12,900 | 14 |
| 12,901 to 13,700 | 15 |
| 13,701 to 14,600 | 16 |
| 14,601 to 15,500 | 17 |
| 15,501 to 16,300 | 18 |
| 16,301 to 17,200 | 19 |

| | |
|------------------------|-----|
| 17,201 to 18,100 | 20 |
| 18,101 to 18,900 | 21 |
| 18,901 to 19,800 | 22 |
| 19,801 to 20,700 | 23 |
| 20,701 to 21,500 | 24 |
| 21,501 to 22,300 | 25 |
| 22,301 to 23,200 | 26 |
| 23,201 to 24,000 | 27 |
| 24,001 to 24,900 | 28 |
| 24,901 to 25,000 | 29 |
| 25,001 to 28,000 | 30 |
| 28,001 to 33,000 | 35 |
| 33,001 to 37,000 | 40 |
| 37,001 to 41,000 | 45 |
| 41,001 to 46,000 | 50 |
| 46,001 to 50,000 | 55 |
| 50,001 to 54,000 | 60 |
| 54,001 to 59,000 | 65 |
| 59,001 to 64,000 | 70 |
| 64,001 to 70,000 | 75 |
| 70,001 to 76,000 | 80 |
| 76,001 to 83,000 | 85 |
| 83,001 to 90,000 | 90 |
| 90,001 to 96,000 | 95 |
| 96,001 to 111,000 | 100 |
| 111,001 to 130,000 | 110 |
| 130,001 to 160,000 | 120 |
| 160,001 to 190,000 | 130 |
| 190,001 to 220,000 | 140 |
| 220,001 to 250,000 | 150 |
| 250,001 to 290,000 | 160 |
| 290,001 to 320,000 | 170 |
| 320,001 to 360,000 | 180 |
| 360,001 to 410,000 | 190 |
| 410,001 to 450,000 | 200 |
| 450,001 to 500,000 | 210 |
| 500,001 to 550,000 | 220 |
| 550,001 to 600,000 | 230 |
| 600,001 to 660,000 | 240 |
| 660,001 to 720,000 | 250 |
| 720,001 to 780,000 | 260 |
| 780,001 to 840,000 | 270 |
| 840,001 to 910,000 | 280 |
| 910,001 to 970,000 | 290 |
| 970,001 to 1,050,000 | 300 |
| 1,050,001 to 1,140,000 | 310 |
| 1,140,001 to 1,230,000 | 320 |
| 1,230,001 to 1,320,000 | 330 |
| 1,320,001 to 1,420,000 | 340 |
| 1,420,001 to 1,520,000 | 350 |
| 1,520,001 to 1,630,000 | 360 |
| 1,630,001 to 1,730,000 | 370 |
| 1,730,001 to 1,850,000 | 380 |
| 1,850,001 to 1,970,000 | 390 |
| 1,970,001 to 2,060,000 | 400 |
| 2,060,001 to 2,270,000 | 410 |
| 2,270,001 to 2,510,000 | 420 |
| 2,510,001 to 2,750,000 | 430 |
| 2,750,001 to 3,020,000 | 440 |
| 3,020,001 to 3,320,000 | 450 |
| 3,320,001 to 3,620,000 | 460 |
| 3,620,001 to 3,960,000 | 470 |
| 3,960,001 to 4,310,000 | 480 |
| 4,310,001 to 4,690,000 | 490 |
| 4,690,001 or more | 500 |

Based on a history of no coliform bacterial contamination and on a sanitary survey by the State showing the water system to be supplied solely by a protected ground water source and free of sanitary defects, a community water system serving 25 to 1,000 persons, with written permission from the State, may reduce this sampling frequency except that in no case shall it be reduced to less than one per quarter.

(c) The supplier of water for a non-community water system shall sample for coliform bacteria in each calendar quarter during which the system provides water to the public. Such sampling shall begin within two years after the effective date of this part. If the State, on the basis of a sanitary survey, determines that some other frequency is more appropriate, that frequency shall be the frequency required under these regulations.

Such frequency shall be confirmed or changed on the basis of subsequent surveys.

(d) (1) When the coliform bacteria in a single sample exceed four per 100 milliliters (§ 141.14(a)), at least two consecutive daily check samples shall be collected and examined from the same sampling point. Additional check samples shall be collected daily, or at a frequency established by the State, until the results obtained from at least two consecutive check samples show less than one coliform bacterium per 100 milliliters.

(2) When coliform bacteria occur in three or more 10 ml portions of a single sample (§ 141.14(b)(1)), at least two consecutive daily check samples shall be collected and examined from the same sampling point. Additional check samples shall be collected daily, or at a frequency established by the State, until the results obtained from at least two consecutive check samples show no positive tubes.

(3) When coliform bacteria occur in all five of the 100 ml portions of a single sample (§ 141.14(b)(2)), at least two daily check samples shall be collected and examined from the same sampling point. Additional check samples shall be collected daily, or at a frequency established by the State, until the results obtained from at least two consecutive check samples show no positive tubes.

(4) The location at which the check samples were taken pursuant to paragraphs (d) (1), (2), or (3) of this section shall not be eliminated from future sampling without approval of the State. The results from all coliform bacterial analyses performed pursuant to this subpart, except those obtained from check samples and special purpose samples, shall be used to determine compliance with the maximum contaminant level for coliform bacteria as established in § 141.14. Check samples shall not be included in calculating the total number of samples taken each month to determine compliance with § 141.21 (b) or (c).

(e) When the presence of coliform bacteria in water taken from a particular sampling point has been confirmed by any check samples examined as directed in paragraphs (d) (1), (2), or (3) of this section, the supplier of water shall report to the State within 48 hours.

(f) When a maximum contaminant level set forth in paragraphs (a), (b) or (c) of § 141.14 is exceeded, the supplier of water shall report to the State and notify the public as prescribed in § 141.31 and § 141.32.

(g) Special purpose samples, such as those taken to determine whether disinfection practices following pipe placement, replacement, or repair have been sufficient, shall not be used to determine compliance with § 141.14 or § 141.21 (b) or (c).

(h) A supplier of water or a community water system or a non-community water system may, with the approval of the State and based upon a sanitary survey, substitute the use of chlorine residual monitoring for not more than 75 percent of the samples required to be taken by paragraph (b) of this section, *Provided*, That the supplier of

water takes chlorine residual samples at points which are representative of the conditions within the distribution system at the frequency of at least four for each substituted microbiological sample. There shall be at least daily determinations of chlorine residual. When the supplier of water exercises the option provided in this paragraph (h) of this section, he shall maintain no less than 0.2 mg/l free chlorine throughout the public water distribution system. When a particular sampling point has been shown to have a free chlorine residual less than 0.2 mg/l, the water at that location shall be retested as soon as practicable and in any event within one hour. If the original analysis is confirmed, this fact shall be reported to the State within 48 hours. Also, if the analysis is confirmed, a sample for coliform bacterial analysis must be collected from that sampling point as soon as practicable and preferably within one hour, and the results of such analysis reported to the State within 48 hours after the results are known to the supplier of water. Analyses for residual chlorine shall be made in accordance with "Standard Methods for the Examination of Water and Wastewater," 13th Ed., pp. 129-132. Compliance with the maximum contaminant levels for coliform bacteria shall be determined on the monthly mean or quarterly mean basis specified in § 141.14, including those samples taken as a result of failure to maintain the required chlorine residual level. The State may withdraw its approval of the use of chlorine residual substitution at any time.

§ 141.22 Turbidity sampling and analytical requirements.

(a) Samples shall be taken by suppliers of water for both community water systems and non-community water systems at a representative entry point(s) to the water distribution system at least once per day, for the purpose of making turbidity measurements to determine compliance with § 141.13. The measurement shall be made by the Nephelometric Method in accordance with the recommendations set forth in "Standard Methods for the Examination of Water and Wastewater," American Public Health Association, 13th Edition, pp. 350-353, or "Methods for Chemical Analysis of Water and Wastes," pp. 295-298, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974.

(b) If the result of a turbidity analysis indicates that the maximum allowable limit has been exceeded, the sampling and measurement shall be confirmed by resampling as soon as practicable and preferably within one hour. If the repeat sample confirms that the maximum allowable limit has been exceeded, the supplier of water shall report to the State within 48 hours. The repeat sample shall be the sample used for the purpose of calculating the monthly average. If the monthly average of the daily samples exceeds the maximum allowable limit, or if the average of two samples taken on consecutive days exceeds 5 TU, the supplier of water shall report to the State

and notify the public as directed in § 141.31 and § 141.32.

(c) Sampling for non-community water systems shall begin within two years after the effective date of this part.

(d) The requirements of this § 141.22 shall apply only to public water systems which use water obtained in whole or in part from surface sources.

§ 141.23 Inorganic chemical sampling and analytical requirements.

(a) Analyses for the purpose of determining compliance with § 141.11 are required as follows:

(1) Analyses for all community water systems utilizing surface water sources shall be completed within one year following the effective date of this part. These analyses shall be repeated at yearly intervals.

(2) Analyses for all community water systems utilizing only ground water sources shall be completed within two years following the effective date of this part. These analyses shall be repeated at three-year intervals.

(3) For non-community water systems, whether supplied by surface or ground water sources, analyses for nitrate shall be completed within two years following the effective date of this part. These analyses shall be repeated at intervals determined by the State.

(b) If the result of an analysis made pursuant to paragraph (a) indicates that the level of any contaminant listed in § 141.11 exceeds the maximum contaminant level, the supplier of water shall report to the State within 7 days and initiate three additional analyses at the same sampling point within one month.

(c) When the average of four analyses made pursuant to paragraph (b) of this section, rounded to the same number of significant figures as the maximum contaminant level for the substance in question, exceeds the maximum contaminant level, the supplier of water shall notify the State pursuant to § 141.31 and give notice to the public pursuant to § 141.32. Monitoring after public notification shall be at a frequency designated by the State and shall continue until the maximum contaminant level has not been exceeded in two successive samples or until a monitoring schedule as a condition to a variance, exemption or enforcement action shall become effective.

(d) The provisions of paragraphs (b) and (c) of this section notwithstanding, compliance with the maximum contaminant level for nitrate shall be determined on the basis of the mean of two analyses. When a level exceeding the maximum contaminant level for nitrate is found, a second analysis shall be initiated within 24 hours, and if the mean of the two analyses exceeds the maximum contaminant level, the supplier of water shall report his findings to the State pursuant to § 141.31 and shall notify the public pursuant to § 141.32.

(e) For the initial analyses required by paragraph (a) (1), (2) or (3) of this section, data for surface waters acquired within one year prior to the effective date

and data for ground waters acquired within 3 years prior to the effective date of this part may be substituted at the discretion of the State.

(f) Analyses conducted to determine compliance with § 141.11 shall be made in accordance with the following methods:

(1) Arsenic—Atomic Absorption Method, "Methods for Chemical Analysis of Water and Wastes," pp. 95-96, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974.

(2) Barium—Atomic Absorption Method, "Standard Methods for the Examination of Water and Wastewater," 13th Edition, pp. 210-215, or "Methods for Chemical Analysis of Water and Wastes," pp. 97-98, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974.

(3) Cadmium—Atomic Absorption Method, "Standard Methods for the Examination of Water and Wastewater," 13th Edition, pp. 210-215, or "Methods for Chemical Analysis of Water and Wastes," pp. 101-103, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974.

(4) Chromium—Atomic Absorption Method, "Standard Methods for the Examination of Water and Wastewater," 13th Edition, pp. 210-215, or "Methods for Chemical Analysis of Water and Wastes," pp. 105-106, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974.

(5) Lead—Atomic Absorption Method, "Standard Methods for the Examination of Water and Wastewater," 13th Edition, pp. 210-215, or "Methods for Chemical Analysis of Water and Wastes," pp. 112-113, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974.

(6) Mercury—Flameless Atomic Absorption Method, "Methods for Chemical Analysis of Water and Wastes," pp. 118-126, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974.

(7) Nitrate—Brucine Colorimetric Method, "Standard Methods for the Examination of Water and Wastewater," 13th Edition, pp. 461-464, or Cadmium Reduction Method, "Methods for Chemical Analysis of Water and Wastes," pp. 201-206, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974.

(8) Selenium—Atomic Absorption Method, "Methods for Chemical Analysis of Water and Wastes," p. 145, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974.

(9) Silver—Atomic Absorption Method, "Standard Methods for the Examination of Water and Wastewater," 13th Edition, pp. 210-215, or "Methods for Chemical Analysis of Water and Wastes," p. 146, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974.

(10) Fluoride—Electrode Method, "Standard Methods for the Examination of Water and Wastewater," 13th Edition,

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pp. 172-174, or "Methods for Chemical Analysis of Water and Wastes," pp. 65-67, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974, or Colorimetric Method with Preliminary Distillation, "Standard Methods for the Examination of Water and Wastewater," 13th Edition, pp. 171-172 and 174-176, or "Methods for Chemical Analysis of Water and Wastes," pp. 59-60, Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974.

§ 141.24 Organic chemical sampling and analytical requirements.

(a) An analysis of substances for the purpose of determining compliance with § 141.12 shall be made as follows:

(1) For all community water systems utilizing surface water sources, analyses shall be completed within one year following the effective date of this part. Samples analyzed shall be collected during the period of the year designated by the State as the period when contamination by pesticides is most likely to occur. These analyses shall be repeated at intervals specified by the State but in no event less frequently than at three year intervals.

(2) For community water systems utilizing only ground water sources, analyses shall be completed by those systems specified by the State.

(b) If the result of an analysis made pursuant to paragraph (a) of this section indicates that the level of any contaminant listed in § 141.12 exceeds the maximum contaminant level, the supplier of water shall report to the State within 7 days and initiate three additional analyses within one month.

(c) When the average of four analyses made pursuant to paragraph (b) of this section, rounded to the same number of significant figures as the maximum contaminant level for the substance in question, exceeds the maximum contaminant level, the supplier of water shall report to the State pursuant to § 141.31 and give notice to the public pursuant to § 141.32. Monitoring after public notification shall be at a frequency designated by the State and shall continue until the maximum contaminant level has not been exceeded in two successive samples or until a monitoring schedule as a condition to a variance, exemption or enforcement action shall become effective.

(d) For the initial analysis required by paragraph (a) (1) and (2) of this section, data for surface water acquired within one year prior to the effective date of this part and data for ground water acquired within three years prior to the effective date of this part may be substituted at the discretion of the State.

(e) Analyses made to determine compliance with § 141.12(a) shall be made in accordance with "Method for Organochlorine Pesticides in Industrial Effluents," MDQARL, Environmental Protection Agency, Cincinnati, Ohio, November 28, 1973.

(f) Analyses made to determine compliance with § 141.12(b) shall be conducted in accordance with "Methods for Chlorinated Phenoxy Acid Herbicides in

Industrial Effluents," MDQARL, Environmental Protection Agency, Cincinnati, Ohio, November 28, 1973.

§ 141.25 Analytical Methods for Radioactivity.

[41 FR 28402, July 9, 1976]

(a) The methods specified in *Interim Radiochemical Methodology for Drinking Water*, Environmental Monitoring and Support Laboratory, EPA-600/4-75-008, USEPA, Cincinnati, Ohio 45268, or those listed below, are to be used to determine compliance with §§ 141.15 and 141.16 (radioactivity) except in cases where alternative methods have been approved in accordance with § 141.27.

(1) Gross Alpha and Beta—Method 302 "Gross Alpha and Beta Radioactivity in Water" *Standard Methods for the Examination of Water and Wastewater*, 13th Edition, American Public Health Association, New York, N.Y., 1971.

(2) Total Radium—Method 304 "Radium in Water by Precipitation" *Ibid.*

(3) Radium-226—Method 305 "Radium-226 by Radon in Water" *Ibid.*

(4) Strontium-89,90 — Method 303 "Total Strontium and Strontium-90 in Water" *Ibid.*

(5) Tritium—Method 306 "Tritium in Water" *Ibid.*

(6) Cesium-134 — ASTM D-2459 "Gamma Spectrometry in Water," 1975 *Annual Book of ASTM Standards, Water and Atmospheric Analysis*, Part 31, American Society for Testing and Materials, Philadelphia, PA. (1975).

(7) Uranium—ASTM D-2907 "Microquantities of Uranium in Water by Fluorometry," *Ibid.*

(b) When the identification and measurement of radionuclides other than those listed in paragraph (a) is required, the following references are to be used, except in cases where alternative methods have been approved in accordance with § 141.27.

(1) *Procedures for Radiochemical Analysis of Nuclear Reactor Aqueous Solutions*, H. L. Krieger and S. Gold, EPA-R4-73-014, USEPA, Cincinnati, Ohio, May 1973.

(2) *HASL Procedure Manual*, Edited by John H. Harley, HASL 300, ERDA Health and Safety Laboratory, New York, N.Y., 1973.

(c) For the purpose of monitoring radioactivity concentrations in drinking water, the required sensitivity of the radioanalysis is defined in terms of a detection limit. The detection limit shall be that concentration which can be counted with a precision of plus or minus 100 percent at the 95 percent confidence level (1.96σ where σ is the standard deviation of the net counting rate of the sample).

(1) To determine compliance with § 141.15 (a) the detection limit shall not exceed 1 pCi/l. To determine compliance with § 141.15 (b) the detection limit shall not exceed 3 pCi/l.

(2) To determine compliance with § 141.16 the detection limits shall not exceed the concentrations listed in Table B.

TABLE B.—DETECTION LIMITS FOR MAN-MADE BETA PARTICLE AND PHOTON EMITTERS

| Radionuclide | Detection Limit |
|---------------------|-------------------------------|
| Tritium | 1,000 pCi/l. |
| Strontium-89 | 10 pCi/l. |
| Strontium-90 | 2 pCi/l. |
| Iodine-131 | 1 pCi/l. |
| Cesium-134 | 10 pCi/l. |
| Gross beta | 4 pCi/l. |
| Other radionuclides | 1/10 of the applicable limit. |

(d) To judge compliance with the maximum contaminant levels listed in sections 141.15 and 141.16, averages of data shall be used and shall be rounded to the same number of significant figures as the maximum contaminant level for the substance in question.

§ 141.26 Monitoring Frequency for Radioactivity in Community Water Systems.

[41 FR 28402, July 9, 1976]

(a) Monitoring requirements for gross alpha particle activity, radium-226 and radium-228.

(1) Initial sampling to determine compliance with § 141.15 shall begin within two years of the effective date of these regulations and the analysis shall be completed within three years of the effective date of these regulations. Compliance shall be based on the analysis of an annual composite of four consecutive quarterly samples or the average of the analyses of four samples obtained at quarterly intervals.

(i) A gross alpha particle activity measurement may be substituted for the required radium-226 and radium-228 analysis *Provided*, That the measured gross alpha particle activity does not exceed 5 pCi/l at a confidence level of 95 percent (1.65σ where σ is the standard deviation of the net counting rate of the sample). In localities where radium-228 may be present in drinking water, it is recommended that the State require radium-226 and/or radium-228 analyses when the gross alpha particle activity exceeds 2 pCi/l.

(ii) When the gross alpha particle activity exceeds 5 pCi/l, the same or an equivalent sample shall be analyzed for radium-226. If the concentration of radium-226 exceeds 3 pCi/l the same or an equivalent sample shall be analyzed for radium-228.

(2) For the initial analysis required by paragraph (a) (1), data acquired within one year prior to the effective date of this part may be substituted at the discretion of the State.

(3) Suppliers of water shall monitor at least once every four years following the procedure required by paragraph (a) (1). At the discretion of the State, when an annual record taken in conformance with paragraph (a) (1) has established that the average annual concentration is less than half the maximum contaminant levels established by § 141.15, analysis of a single sample may be substituted for the quarterly sampling procedure required by paragraph (a) (1).

(i) More frequent monitoring shall be conducted when ordered by the State in the vicinity of mining or other operations which may contribute alpha particle radioactivity to either surface or ground water sources of drinking water.

(ii) A supplier of water shall monitor in conformance with paragraph (a) (1) within one year of the introduction of a new water source for a community water system. More frequent monitoring shall be conducted when ordered by the State in the event of possible contamination or when changes in the distribution system or treatment processing occur which may increase the concentration of radioactivity in finished water.

(iii) A community water system using two or more sources having different concentrations of radioactivity shall monitor source water, in addition to water from a free-flowing tap, when ordered by the State.

(iv) Monitoring for compliance with § 141.15 after the initial period need not include radium-228 except when required by the State. *Provided*, That the average annual concentration of radium-228 has been assayed at least once using the quarterly sampling procedure required by paragraph (a) (1).

(v) Suppliers of water shall conduct annual monitoring of any community water system in which the radium-226 concentration exceeds 3 pCi/l, when ordered by the State.

(4) If the average annual maximum contaminant level for gross alpha particle activity or total radium as set forth in § 141.15 is exceeded, the supplier of a community water system shall give notice to the State pursuant to § 141.31 and notify the public as required by § 141.32. Monitoring at quarterly intervals shall be continued until the annual average concentration no longer exceeds the maximum contaminant level or until a monitoring schedule as a condition to a variance, exemption or enforcement action shall become effective.

(b) Monitoring requirements for man-made radioactivity in community water systems.

(1) Within two years of the effective date of this part, systems using surface water sources and serving more than 100,000 persons and such other community water systems as are designated by the State shall be monitored for compliance with § 141.16 by analysis of a composite of four consecutive quarterly samples or analysis of four quarterly samples. Compliance with § 141.16 may be assumed without further analysis if the average annual concentration of gross beta particle activity is less than 50 pCi/l and if the average annual concentrations of tritium and strontium-90 are less than those listed in Table A. *Provided*, That if both radionuclides are present the sum of their annual dose equivalents to bone marrow shall not exceed 4 millirem/year.

(i) If the gross beta particle activity exceeds 50 pCi/l, an analysis of the sample must be performed to identify the major radioactive constituents present and the appropriate organ and total body doses shall be calculated to determine compliance with § 141.16.

(ii) Suppliers of water shall conduct additional monitoring, as ordered by the State, to determine the concentration of man-made radioactivity in principal watersheds designated by the State.

(iii) At the discretion of the State, suppliers of water utilizing only ground

waters may be required to monitor for man-made radioactivity.

(2) For the initial analysis required by paragraph (b) (1) data acquired within one year prior to the effective date of this part may be substituted at the discretion of the State.

(3) After the initial analysis required by paragraph (b) (1) suppliers of water shall monitor at least every four years following the procedure given in paragraph (b) (1).

(4) Within two years of the effective date of these regulations the supplier of any community water system designated by the State as utilizing waters contaminated by effluents from nuclear facilities shall initiate quarterly monitoring for gross beta particle and iodine-131 radioactivity and annual monitoring for strontium-90 and tritium.

(i) Quarterly monitoring for gross beta particle activity shall be based on the analysis of monthly samples or the analysis of a composite of three monthly samples. The former is recommended. If the gross beta particle activity in a sample exceeds 15 pCi/l, the same or an equivalent sample shall be analyzed for strontium-89 and cesium-134. If the gross beta particle activity exceeds 50 pCi/l, an analysis of the sample must be performed to identify the major radioactive constituents present and the appropriate organ and total body doses shall be calculated to determine compliance with § 141.16.

(ii) For iodine-131, a composite of five consecutive daily samples shall be analyzed once each quarter. As ordered by the State, more frequent monitoring shall be conducted when iodine-131 is identified in the finished water.

(iii) Annual monitoring for strontium-90 and tritium shall be conducted by means of the analysis of a composite of four consecutive quarterly samples or analysis of four quarterly samples. The latter procedure is recommended.

(iv) The State may allow the substitution of environmental surveillance data taken in conjunction with a nuclear facility for direct monitoring of man-made radioactivity by the supplier of water where the State determines such data is applicable to a particular community water system.

(5) If the average annual maximum contaminant level for man-made radioactivity set forth in § 141.16 is exceeded, the operator of a community water system shall give notice to the State pursuant to § 141.31 and to the public as required by § 141.32. Monitoring at monthly intervals shall be continued until the concentration no longer exceeds the maximum contaminant level or until a monitoring schedule as a condition to a variance, exemption or enforcement action shall become effective.

§ 141.27 Alternative analytical techniques.

With the written permission of the State, concurred in by the Administrator of the U.S. Environmental Protection Agency, an alternative analytical technique may be employed. An alternative technique shall be acceptable only if it is substantially equivalent to the

prescribed test in both precision and accuracy as it relates to the determination of compliance with any maximum contaminant level. The use of the alternative analytical technique shall not decrease the frequency of monitoring required by this part.

§ 141.28 Approved laboratories.

For the purpose of determining compliance with § 141.21 through § 141.27, samples may be considered only if they have been analyzed by a laboratory approved by the State except that measurements for turbidity and free chlorine residual may be performed by any person acceptable to the State.

§ 141.29 Monitoring of consecutive public water systems.

When a public water system supplies water to one or more other public water systems, the State may modify the monitoring requirements imposed by this part to the extent that the interconnection of the systems justifies treating them as a single system for monitoring purposes. Any modified monitoring shall be conducted pursuant to a schedule specified by the State and concurred in by the Administrator of the U.S. Environmental Protection Agency.

Subpart D—Reporting, Public Notification and Record Keeping

§ 141.31 Reporting requirements.

(a) Except where a shorter reporting period is specified in this part, the supplier of water shall report to the State within 40 days following a test, measurement or analysis required to be made by this part, the results of that test, measurement or analysis.

(b) The supplier of water shall report to the State within 48 hours the failure to comply with any primary drinking water regulation (including failure to comply with monitoring requirements) set forth in this part.

(c) The supplier of water is not required to report analytical results to the State in cases where a State laboratory performs the analysis and reports the results to the State office which would normally receive such notification from the supplier.

§ 141.32 Public notification.

(a) If a community water system fails to comply with an applicable maximum contaminant level established in Subpart B, fails to comply with an applicable testing procedure established in Subpart C of this part, is granted a variance or an exemption from an applicable maximum contaminant level, fails to comply with the requirements of any schedule prescribed pursuant to a variance or exemption, or fails to perform any monitoring required pursuant to Section 1445 (a) of the Act, the supplier of water shall notify persons served by the system of the failure or grant by inclusion of a notice in the first set of water bills of the system issued after the failure or grant and in any event by written notice within three months. Such notice shall be repeated at least once every three months

so long as the system's failure continues or the variance or exemption remains in effect. If the system issues water bills less frequently than quarterly, or does not issue water bills, the notice shall be made by or supplemented by another form of direct mail.

(b) If a community water system has failed to comply with an applicable maximum contaminant level, the supplier of water shall notify the public of such failure, in addition to the notification required by paragraph (a) of this section, as follows:

(1) By publication on not less than three consecutive days in a newspaper or newspapers of general circulation in the area served by the system. Such notice shall be completed within fourteen days after the supplier of water learns of the failure.

(2) By furnishing a copy of the notice to the radio and television stations serving the area served by the system. Such notice shall be furnished within seven days after the supplier of water learns of the failure.

(c) If the area served by a community water system is not served by a daily newspaper of general circulation, notification by newspaper required by paragraph (b) of this section shall instead be given by publication on three consecutive weeks in a weekly newspaper of general circulation serving the area. If no weekly or daily newspaper of general circulation serves the area, notice shall be given by posting the notice in post offices within the area served by the system.

(d) If a non-community water system fails to comply with an applicable maximum contaminant level established in Subpart B of this part, fails to comply with an applicable testing procedure established in Subpart C of this part, is granted a variance or an exemption from an applicable maximum contaminant level, fails to comply with the requirement of any schedule prescribed pursuant to a variance or exemption or fails to perform any monitoring required pursuant to Section 1445(a) of the Act, the supplier of water shall give notice of such failure or grant to the persons served by the system. The form and manner of such notice shall be prescribed by the State, and shall insure that the public using the system is adequately informed of the failure or grant.

(e) Notices given pursuant to this section shall be written in a manner reasonably designed to inform fully the users of the system. The notice shall be conspicuous and shall not use unduly technical language, unduly small print or other methods which would frustrate the purpose of the notice. The notice shall

disclose all material facts regarding the subject including the nature of the problem and, when appropriate, a clear statement that a primary drinking water regulation has been violated and any preventive measures that should be taken by the public. Where appropriate, or where designated by the State, bilingual notice shall be given. Notices may include a balanced explanation of the significance or seriousness to the public health of the subject of the notice, a fair explanation of steps taken by the system to correct any problem and the results of any additional sampling.

(f) Notice to the public required by this section may be given by the State on behalf of the supplier of water.

(g) In any instance in which notification by mail is required by paragraph (a) of this section but notification by newspaper or to radio or television stations is not required by paragraph (b) of this section, the State may order the supplier of water to provide notification by newspaper and to radio and television stations when circumstances make more immediate or broader notice appropriate to protect the public health.

§ 141.33 Record maintenance.

Any owner or operator of a public water system subject to the provisions of this part shall retain on its premises or at a convenient location near its premises the following records:

(a) Records of bacteriological analyses made pursuant to this part shall be kept for not less than 5 years. Records of chemical analyses made pursuant to this part shall be kept for not less than 10 years. Actual laboratory reports may be kept, or data may be transferred to tabular summaries, provided that the following information is included:

(1) The date, place, and time of sampling, and the name of the person who collected the sample;

(2) Identification of the sample as to whether it was a routine distribution system sample, check sample, raw or process water sample or other special purpose sample;

(3) Date of analysis;

(4) Laboratory and person responsible for performing analysis;

(5) The analytical technique/method used; and

(6) The results of the analysis.

(b) Records of action taken by the system to correct violations of primary drinking water regulations shall be kept for a period not less than 3 years after the last action taken with respect to the particular violation involved.

(c) Copies of any written reports, summaries or communications relating to sanitary surveys of the system con-

ducted by the system itself, by a private consultant, or by any local, State or Federal agency, shall be kept for a period not less than 10 years after completion of the sanitary survey involved.

(d) Records concerning a variance or exemption granted to the system shall be kept for a period ending not less than 5 years following the expiration of such variance or exemption.

Subpart E—Special Monitoring Regulations for Organic Chemicals

§ 141.40 Special monitoring for organic chemicals.

(a) The Administrator may designate, by publication in the FEDERAL REGISTER, public water systems which are required to take water samples, provide information, and in appropriate cases analyze water samples for the purpose of providing information on contamination of drinking water sources and of treated water by organic chemicals.

(b) The Administrator shall provide to each public system designated pursuant to paragraph (a) of this section a written schedule for the sampling of source water or treated water by the system, with written instructions for the sampling methods and for handling of samples. The schedule may designate the locations or types of locations to be sampled.

(c) In cases where the public water system has a laboratory capable of analyzing samples for constituents specified by the Administrator, the Administrator may require analyses to be made by the public water system for submission to EPA. If the Administrator requires the analyses to be made by the public water system, he shall provide the system with written instructions as to the analytical procedures to be followed, or with references to technical documents describing the analytical procedures.

(d) Public water systems designated by the Administrator pursuant to paragraph (a) of this section shall provide to the Administrator, upon request, information to be used in the evaluation of analytical results, including records of previous monitoring and analyses, information on possible sources of contamination and treatment techniques used by the system.

(Secs. 1445 and 1450 of the Public Health Service Act, 88 Stat. 1660 (42 U.S.C. 300j-4 and 300j-9))

ENVIRONMENTAL PROTECTION AGENCY NATIONAL INTERIM PRIMARY DRINKING WATER REGULATIONS IMPLEMENTATION

(40 CFR 142; 41 FR 2916, January 20, 1976; 43 FR 5373, February 8, 1978)

Title 40—Protection of Environment CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY

PART 142—NATIONAL INTERIM PRIMARY DRINKING WATER REGULATIONS IM- PLEMENTATION

Implementation of Standards

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AUTHORITY: Secs. 1413, 1414, 1415, 1416, 1445 and 1450 of Pub. L. 93-523, 88 Stat. 1660 (42 U.S.C. 300g-2, 300g-3, 300g-4, 300g-5, 300j-4 and 300j-9).

Subpart A—General Provisions

§ 142.1 Applicability.

This part sets forth, pursuant to Sections 1413 through 1416, 1445 and 1450 of the Public Health Service Act, as amended by the Safe Drinking Water Act, Pub. L. 93-523, regulations for the implementation and enforcement of the national primary drinking water regulations contained in Part 141 of this chapter.

§ 142.2 Definitions.

As used in this part, and except as otherwise specifically provided:

(a) "Act" means the Public Health Service Act.

(b) "Administrator" means the Administrator of the United States Environmental Protection Agency or his authorized representative.

(c) "Agency" means the United States Environmental Protection Agency.

(d) "Contaminant" means any physical, chemical, biological, or radiological substance or matter in water.

(e) "Federal agency" means any department, agency, or instrumentality of the United States.

(f) "Maximum contaminant level" means the maximum permissible level of a contaminant in water which is delivered to the free flowing outlet of the ultimate user of a public water system; except in the case of turbidity where the maximum permissible level is measured at the point of entry to the distribution system. Contaminants added to the water under circumstances controlled by the user, except for those resulting from corrosion of piping and plumbing caused by water quality are excluded from this definition.

(g) "Municipality" means a city, town or other public body created by or pursuant to State law, or an Indian tribal organization authorized by law.

(h) "National primary drinking water regulation" means any primary drinking water regulation contained in Part 141 of this chapter.

(i) "Person" means an individual, corporation, company, association, partnership, State, municipality or Federal agency.

(j) "Primary enforcement responsibility" means the primary responsibility for administration and enforcement of primary drinking water regulations and related requirements applicable to public water systems within a State.

(k) "Public water system" means a system for the provision to the public of piped water for human consumption, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year. Such term includes (1) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (2) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system.

(l) "Sanitary survey" means an on-site review of the water source, facilities, equipment, operation and maintenance of a public water system for the purpose of evaluating the adequacy of such source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water.

(m) "State" means one of the States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, or the Trust Territory of the Pacific Islands.

(n) "State primary drinking water regulation" means a drinking water regulation of a State which is comparable to a national primary drinking water regulation.

(o) "Supplier of water" means any person who owns or operates a public water system.

(p) "Treatment technique requirement" means a requirement of the national primary drinking water regulations which specifies for a contaminant a specific treatment technique(s) known to the Administrator which leads to a reduction in the level of such contaminant sufficient to comply with the requirements of Part 141 of this chapter.

§ 142.3 Scope.

(a) Except where otherwise provided, this part applies to each public water system in each State; except that this part shall not apply to a public water system which meets all of the following conditions:

(1) which consists only of distribution and storage facilities (and does not have any collection and treatment facilities);

(2) which obtains all of its water from, but is not owned or operated by, a public water system to which such regulations apply;

(3) which does not sell water to any person; and

(4) which is not a carrier which conveys passengers in interstate commerce.

(b) In order to qualify for primary enforcement responsibility, a State's program for enforcement of primary drinking water regulations must apply to all other public water systems in the State, except for:

(1) public water systems on carriers which convey passengers in interstate commerce;

(2) public water systems on Indian land with respect to which the State does not have the necessary jurisdiction or its jurisdiction is in question; or

(3) public water systems owned or maintained by a Federal agency where the Administrator has waived compliance with national primary drinking water regulations pursuant to Section 1447(b) of the Act.

§ 142.4 State and Local Authority.

Nothing in this part shall diminish any authority of a State or political subdivision to adopt or enforce any law or regulation respecting drinking water regulations or public water systems, but no such law or regulation shall relieve any person of any requirements otherwise applicable under this part.

Subpart B—Primary Enforcement Responsibility**§ 142.10 Requirements for a Determination of Primary Enforcement Responsibility.**

A State has primary enforcement responsibility for public water systems in the State during any period for which the Administrator determines, based upon a submission made pursuant to § 142.11, that such State, pursuant to appropriate State legal authority:

(a) Has adopted State primary drinking water regulations which (1) in case of the period beginning on the date the national interim primary drinking water regulations are promulgated in Part 141 of this chapter and ending on the date such regulations take effect are no less stringent than such regulations and (2) in the case of the period after such effective date are no less stringent than the interim and revised national primary drinking water regulations in effect under such part;

(b) Has adopted and is implementing adequate procedures for the enforcement of such State regulations, such procedures to include:

(1) Maintenance of an inventory of public water systems.

(2) A systematic program for conducting sanitary surveys of public water systems in the State, with priority given to sanitary surveys of public water systems not in compliance with State primary drinking water regulations.

(3) The establishment and maintenance of a State program for the certification of laboratories conducting analytical measurements of drinking water contaminants pursuant to the requirements of the State primary drinking water regulations including the designation by the State of a laboratory officer, or officers, certified by the Administrator, as the official(s) responsible for the State's certification program. The requirements of this paragraph may be waived by the Administrator for any State where all analytical measurements required by the State's primary drinking water regulations are conducted at laboratories operated by the State and certified by the Agency. Until such time as the Agency establishes a National quality assurance program for laboratory certification the State shall maintain an interim program for the purpose of approving those laboratories from which the required analytical measurements will be acceptable.

(4) Assurance of the availability to the State of laboratory facilities certified by the Administrator and capable of performing analytical measurements of all contaminants specified in the State primary drinking water regulations.

Until such time as the Agency establishes a National quality assurance program for laboratory certification the Administrator will approve such State laboratories on an interim basis.

(5) The establishment and maintenance of an activity to assure that the design and construction of new or substantially modified public water system facilities will be capable of compliance with the State primary drinking water regulations.

(6) Statutory or regulatory enforcement authority adequate to compel compliance with the State primary drinking water regulations in appropriate cases, such authority to include:

(i) Authority to apply State primary drinking water regulations to all public water systems in the State covered by the national primary drinking water regulations, except for interstate carrier conveyances and systems on Indian land with respect to which the State does not have the necessary jurisdiction or its jurisdiction is in question.

(ii) Authority to sue in courts of competent jurisdiction to enjoin any threatened or continuing violation of the State primary drinking water regulations.

(iii) Right of entry and inspection of public water systems, including the right to take water samples, whether or not the State has evidence that the system is in violation of an applicable legal requirement.

(iv) Authority to require suppliers of

water to keep appropriate records and make appropriate reports to the State.

(v) Authority to require public water systems to give public notice of violations of State primary drinking water regulations to the extent set forth in § 142.16, and authority to order additional notification when circumstances make more immediate or broader notice appropriate to protect the public health.

(vi) Authority to assess civil or criminal penalties for violation of the State's primary drinking water regulations and public notification requirements, including the authority to assess daily penalties or multiple penalties when a violation continues.

(c) Has established and will maintain record keeping and reporting of its activities under paragraphs (a), (b) and (d) in compliance with §§ 142.14 and 142.15;

(d) If it permits variances or exemptions, or both, from the requirements of the State primary drinking water regulations; it shall do so under conditions and in a manner which is no less stringent than the conditions under which, and the manner in which, variances and exemptions may be granted under Sections 1415 and 1416 of the Act (regulations governing the issuance of variances and exemptions by the Administrator in States that do not have primary enforcement responsibility are set forth in Subparts E and F. States with primary enforcement responsibility may adopt procedures different from those set forth in Subparts E and F, provided that the State procedures meet the requirements of this paragraph); and

(e) Has adopted and can implement an adequate plan for the provision of safe drinking water under emergency circumstances.

§ 142.11 Request for Determination of Primary Enforcement Responsibility.

A State may apply to the Administrator for a determination that the State has primary enforcement responsibility for public water systems in the State pursuant to Section 1413 of the Act. The application shall be as concise as possible and describe the State's compliance with each of the five requirements set forth in § 142.10, and include the following information:

(a) The text of the State's primary drinking water regulations, with references to those State regulations that vary from comparable regulations set forth in Part 141 of this chapter, and a demonstration that any different State regulation is at least as stringent as the comparable regulation contained in Part 141.

(b) A description, accompanied by appropriate documentation, of the State's procedures for the enforcement of the State primary drinking water regulations. The submission shall include:

(1) A brief description of the State's program to maintain a current inventory of public water systems.

(2) A brief description of the State's program for conducting sanitary surveys,

including an explanation of the priorities given to various classes of public water systems.

(3) A brief description of the State's laboratory approval or certification program, including the name(s) of the responsible State laboratory officer(s) certified by the Administrator.

(4) Identification of laboratory facilities, available to the State, certified or approved by the Administrator and capable of performing analytical measurements of all contaminants specified in the State's primary drinking water regulations.

(5) A brief description of the State's program activity to assure that the design and construction of new or substantially modified public water system facilities will be capable of compliance with the requirements of the State primary drinking water regulations.

(6) Copies of State statutory and regulatory provisions authorizing the adoption and enforcement of State primary drinking water regulations, and a brief description of State procedures for administrative or judicial action with respect to public water systems not in compliance with such regulations.

(c) A statement that the State will make such reports and will keep such records as may be required pursuant to §§ 142.14 and 142.15.

(d) If the State permits variances or exemptions from its primary drinking water regulations, the text of the State's statutory and regulatory provisions concerning variances and exemptions.

(e) A brief description of the State's plan for the provision of safe drinking water under emergency conditions.

§ 142.12 Determination of Primary Enforcement Responsibility.

(a) (1) The administrator shall act on an application submitted pursuant to § 142.11 within 90 days after receiving such application, and shall promptly inform the State in writing of his action. If he denies the application, his written notification to the State shall include a statement of reasons for the denial.

(2) A determination by the Administrator that a State has met the requirements for primary enforcement responsibility shall take effect in accordance with § 142.13.

(3) When the Administrator's determination becomes effective pursuant to § 142.13, it shall continue in effect unless terminated pursuant to paragraph (b) of this section.

(b) (1) The administrator shall annually review, with respect to each State determined to have primary enforcement responsibility, the compliance of the State with the requirements set forth in § 142.10.

(2) When the Administrator's annual review, or other information available to him, indicate that a State no longer meets the requirements set forth in § 142.10, he shall notify the State in writing of that fact and shall summarize in his notice the information available to him which indicates that the State no longer meets such requirements.

(3) The State notified pursuant to subparagraph (2) of this paragraph may, within 30 days of receiving the Administrator's notice, submit to the Administrator evidence demonstrating that the State continues to meet the requirements for primary enforcement responsibility.

(4) After reviewing the submission of the State, if any, made pursuant to subparagraph (3) of this paragraph the Administrator shall either determine that the State no longer meets the requirements of § 142.10 or that the State continues to meet those requirements, and shall notify the State of his determination. Any determination that the State no longer meets the requirements of § 142.10 shall not become effective except as provided in § 142.13.

(c) If a State which has primary enforcement responsibility determines to relinquish that authority, it may do so by notifying the Administrator in writing of the State's decision at least 90 days before the effective date of the decision.

§ 142.13 Public Hearing.

(a) Before any determination pursuant to § 142.12(a) that a State meets the requirements of § 142.10 for primary enforcement responsibility becomes effective, or any determination pursuant to § 142.12(b) that a State no longer meets the requirements of § 142.10 becomes effective, the Administrator shall provide an opportunity for public hearing on his determination.

(b) The Administrator shall publish notice of any determination specified in paragraph (a) of this section in the FEDERAL REGISTER and in a newspaper or newspapers of general circulation in the State involved within 15 days after making such determination, with a statement of his reasons for the determination. Such notice shall inform interested persons that they may request a public hearing on the Administrator's determination. Such notice shall also indicate one or more locations in the State where information submitted by the State pursuant to § 142.11 is available for inspection by the general public. A public hearing may be requested by any interested person other than a Federal agency. Frivolous or insubstantial requests for hearing may be denied by the Administrator.

(c) Requests for hearing submitted pursuant to paragraph (b) of this section shall be submitted to the Administrator within 30 days after publication of notice of opportunity for hearing in the FEDERAL REGISTER. Such requests shall include the following information:

(1) The name, address and telephone number of the individual, organization or other entity requesting a hearing.

(2) A brief statement of the requesting person's interest in the Administrator's determination and of information that the requesting person intends to submit at such hearing.

(3) The signature of the individual making the request; or, if the request is made on behalf of an organization or

other entity, the signature of a responsible official of the organization or other entity.

(d) The Administrator shall give notice in the FEDERAL REGISTER and in a newspaper or newspapers of general circulation in the State involved of any hearing to be held pursuant to a request submitted by an interested person or on his own motion. Notice of the hearing shall also be sent to the person requesting a hearing, if any, and to the State involved. Notice of the hearing shall include a statement of the purpose of the hearing, information regarding the time and location or locations for the hearing and the address and telephone number of an office at which interested persons may obtain further information concerning the hearing. At least one hearing location specified in the public notice shall be within the involved State. Notice of hearing shall be given not less than 15 days prior to the time scheduled for the hearing.

(e) Hearings convened pursuant to paragraph (d) of this section shall be conducted before a hearing officer to be designated by the Administrator. The hearing shall be conducted by the hearing officer in an informal, orderly and expeditious manner. The hearing officer shall have authority to call witnesses, receive oral and written testimony and take such other action as may be necessary to assure the fair and efficient conduct of the hearing. Following the conclusion of the hearing, the hearing officer shall forward the record of the hearing to the Administrator.

(f) After reviewing the record of the hearing, the Administrator shall issue an order affirming the determination referred to in paragraph (a) of this section or rescinding such determination. If the determination is affirmed, it shall become effective as of the date of the Administrator's order.

(g) If no timely request for hearing is received and the Administrator does not determine to hold a hearing on his own motion, the Administrator's determination shall become effective 30 days after notice is issued pursuant to paragraph (b) of this section.

(h) If a determination of the Administrator that a State no longer meets the requirements for primary enforcement responsibility becomes effective, the State may subsequently apply for a determination that it meets such requirements by submitting to the Administrator information demonstrating that it has remedied the deficiencies found by the Administrator without adversely sacrificing other aspects of its program required for primary enforcement responsibility.

§ 142.14 Records kept by States.

(a) Each State which has primary enforcement responsibility shall maintain records of tests, measurements and analyses performed on each public water system to determine compliance with applicable provisions of State primary drinking water regulations.

(1) Records of microbiological analyses shall be retained for not less than 1-

year. Actual laboratory reports may be kept or data may be transferred to tabular summaries, provided that the information retained includes:

- (i) The analytical method used;
- (ii) The number of samples analyzed each month;

(iii) The analytical results, set forth in a form which makes possible comparison with the limits specified in § 141.14 of this chapter.

(2) Records of microbiological analyses of check or special samples shall be retained for not less than 1 year in the form of actual laboratory reports or in an appropriate summary form.

(3) Records of turbidity measurements shall be retained for not less than 1 year and shall include at least the following information:

- (i) Date and place of sampling.
- (ii) Date and results of analyses.
- (4) Records of analyses for other than microbiological contaminants or turbidity shall be retained for not less than 40 years and shall include at least the following information:

- (i) Date and place of sampling.
- (ii) Date and results of analyses.

Records retained by a State pursuant to this paragraph for at least 10 years, may be transferred to the Agency to satisfy the remainder of the required 40 year retention period.

(b) Records required to be kept pursuant to paragraph (a) must be in a form admissible as evidence in State enforcement proceedings.

(c) Each State which has primary enforcement responsibility shall maintain current inventory information for each public water system in the State and shall retain inventory records of public water systems for not less than 40 years. Records retained by a State pursuant to this paragraph for at least 10 years may be transferred to the Agency to satisfy the remainder of the 40 year retention period.

(d) Each State which has primary enforcement responsibility shall retain, for not less than 10 years, files which shall include for each such public water system in the State:

- (1) Reports of sanitary surveys;
- (2) Records of any State approvals;
- (3) Records of any enforcement actions.

(e) Each State which has primary enforcement responsibility shall retain records pertaining to each variance and exemption granted by it for a period of not less than 5 years following the expiration of such variance or exemption.

(f) The records required to be kept by this section shall be maintained and made available for public inspection by the State, or, the State at its option may require suppliers of water to make available for public inspection those records maintained in accordance with § 141.33.

§ 142.15 Reports by States.

Each State which has primary enforcement responsibility shall submit to the Administrator the following information:

(a) Additions or corrections to the State's inventory of public water systems, as such additions or corrections are

made if feasible, and in any event by January 1 of each year.

(b) An annual report to be submitted by January 1 of each year, covering the preceding Federal fiscal year ending September 30 of each year, and consisting of:

(1) Summary of violations by public water systems in the State of primary drinking water regulations, except public water systems serving fewer than 25,000 population which will have until June 1, 1978, to report the FY 1977 violations only, and of enforcement actions taken by the State;

(2) A summary of the status of each variance and exemption granted by the State which was in effect during any part of the calendar year.

(c) Prompt notification of the granting of a variance or exemption. The notice shall include a statement of reasons for the granting of the variance or exemption, including support for the need for the variance or exemption and for the finding that the granting of the variance or exemption will not result in an unreasonable risk to health. A single notification statement may be used to report two or more similar variances or exemptions.

(d) The annual report submitted pursuant to paragraph (b) of this section shall be made available by a State to the public for inspection at one or more locations within the State.

§ 142.16 State Public Notification Requirements.

Each State program qualifying for primary enforcement responsibility shall include, at a minimum, the following requirements for public notification by public water systems for violation of State primary drinking water regulations.

(a) Public notification by a supplier of water whenever the supplier's public water system fails to comply with a maximum contaminant level or is granted a variance or exemption from a maximum contaminant level or fails to comply with a schedule for contaminant levels prescribed pursuant to a variance or exemption.

(b) In the case of a community water system (as defined in § 141.2), such notification shall include a notice in the first set of water bills of the system issued after the failure or grant. In the case of a failure to comply with a maximum contaminant level, such written notice shall be repeated not less than once every three months so long as such failure continues; if the system issues water bills less frequently than quarterly, or does not issue water bills, the notice shall be made or supplemented by another form of direct mail. In the case of a failure to comply with a maximum contaminant level which is not corrected promptly after discovery, the supplier of water must give other general public notice of the failure, in addition to notice by direct mail, in a manner required by the State. The additional notice required by the State may consist of notice by newspaper advertisement, by press release or other appropriate means.

(c) If the public water system is a non-community water system (as defined in § 141.2), the notice shall be given by conspicuous posting, in a location where it can be seen by consumers, rather than in the manner specified in paragraph (b) of this section.

(d) Notices given pursuant to this section shall be written in a manner reasonably designed to inform fully the users of the system. The notice shall be conspicuous and shall not use unduly technical language, unduly small print or other methods which would frustrate the purpose of the notice. The notice shall disclose all material facts regarding the subject including the nature of the problem and, where appropriate, a clear statement that a primary drinking water regulation has been violated and any preventive measures that should be taken by the public. Where appropriate, or where designated by the State, bilingual notice shall be given. Notices may include a balanced explanation of the significance or seriousness to the public health of the subject of the notice, a fair explanation of steps taken by the system to correct any problem and the results of any additional sampling.

(e) Notices required by this section may be given by the State on behalf of the supplier of water.

Subpart C—Review of State-Issued Variances and Exemptions

§ 142.20 State-Issued Variances and Exemptions.

States with primary enforcement responsibility may issue variances and exemptions from the requirements of primary drinking water regulations under conditions and in a manner which are not less stringent than the conditions under which, and the manner in which, variances and exemptions may be granted under Sections 1415 and 1416 of the Act. In States that do not have primary enforcement responsibility, variances and exemptions from the requirements of applicable national primary drinking water regulations may be granted by the Administrator pursuant to Subparts E and F.

§ 142.21 State Consideration of a Variance or Exemption Request.

A State with primary enforcement responsibility shall act on any variance or exemption request submitted to it, within 90 days of receipt of the request.

§ 142.22 Review of State Variances, Exemptions and Schedules.

(a) Not later than 18 months after the effective date of the initial national primary drinking water regulations the Administrator shall complete a comprehensive review of the variances and exemptions granted (and schedules prescribed pursuant thereto) by the States with primary enforcement responsibility during the one-year period beginning on such effective date. The Administrator shall conduct such subsequent reviews of exemptions and schedules as he deems necessary to carry out the purposes of this title, but at least one review shall be completed within each 3-year period

following the completion of the first review under this paragraph.

(b) Notice of a proposed review shall be published in the FEDERAL REGISTER. Such notice shall (1) provide information respecting the location of data and other information respecting the variances and exemptions to be reviewed (including data and other information concerning new scientific matters bearing on such variances and exemptions), and (2) advise of the opportunity to submit comments on the variances and exemptions reviewed and on the need for continuing them. Upon completion of any such review, the Administrator shall publish in the FEDERAL REGISTER the results of his review, together with findings responsive to any comments submitted in connection with such review.

§ 142.23 Notice to State.

(a) If the Administrator finds that a State has, in a substantial number of instances, abused its discretion in granting variances or exemptions under Section 1415(a) or Section 1416(a) of the Act or failed to prescribe schedules in accordance with Section 1415(a) or Section 1416(b) of the Act, he shall notify the State of his findings. Such notice shall:

- (1) Identify each public water system for which the finding was made;
- (2) Specify the reasons for the finding; and
- (3) As appropriate, propose revocation of specific variances or exemptions, or propose revised schedules for specific public water systems.

(b) The Administrator shall also notify the State of a public hearing to be held on the provisions of the notice required by paragraph (a) of this section. Such notice shall specify the time and location for the hearing. If, upon notification of a finding by the Administrator, the State takes adequate corrective action, the Administrator shall rescind his notice to the State of a public hearing, provided that the Administrator is notified of the corrective action prior to the hearing.

(c) The Administrator shall publish notice of the public hearing in the FEDERAL REGISTER and in a newspaper or newspapers of general circulation in the involved State including a summary of the findings made pursuant to paragraph (a) of this section, a statement of the time and location for the hearing, and the address and telephone number of an office at which interested persons may obtain further information concerning the hearing.

(d) Hearings convened pursuant to paragraph (b) and (c) of this section shall be conducted before a hearing officer to be designated by the Administrator. The hearing shall be conducted by the hearing officer in an informal, orderly and expeditious manner. The hearing officer shall have authority to call witnesses, receive oral and written testimony and take such other action as may be necessary to assure the fair and efficient conduct of the hearing. Following the conclusion of the hearing, the hearing officer shall forward the record of the hearing to the Administrator.

(e) Within 180 days after the date notice is given pursuant to paragraph (b) of this section, the Administrator shall:

(1) Rescind the finding for which the notice was given and promptly notify the State of such rescission, or

(2) Promulgate with any modifications as appropriate such revocation and revised schedules proposed in such notice and promptly notify the State of such action.

(f) A revocation or revised schedule shall take effect 90 days after the State is notified under paragraph (e) (2) of this section.

§ 142.24 Administrator's Rescission.

If, upon notification of a finding by the Administrator under § 142.23, the State takes adequate corrective action before the effective date of the revocation or revised schedule, the Administrator shall rescind the application of his finding to that variance, exemption or schedule.

Subpart D—Federal Enforcement

§ 142.30 Failure by State to Assure Enforcement.

(a) The Administrator shall notify a State and the appropriate supplier of water whenever he finds during a period in which the State has primary enforcement responsibility for public water systems that a public water system within such State is not in compliance with any primary drinking water regulation contained in Part 141 of this chapter or with any schedule or other requirements imposed pursuant to a variance or exemption granted under Section 1415 or 1416 of the Act; provided, that the State will be deemed to have been notified of a violation referred to in a report submitted by the State.

(b) The Administrator shall provide advice and technical assistance to such State and public water system as may be appropriate to bring the system into compliance by the earliest feasible time.

(c) If the Administrator finds that the public water system fails to comply within 30 days after the date of the notice given to the State pursuant to paragraph (a), and fails to initiate appropriate corrective actions to bring the system into compliance by the earliest feasible time, the Administrator shall give public notice of his findings of non-compliance. Such notice shall be by publication in the FEDERAL REGISTER, and in a newspaper of general circulation or by other appropriate communications media covering the area served by such public water system. The Administrator shall also mail a copy of the notification to the supplier of water.

(d) The Administrator shall request the State to report to him within 15 days from the date of such public notice. Such report shall specify information including but not limited to:

(1) Reasons for any failure by the State to bring the system into compliance,

(2) A timetable with increments of progress by which compliance will be achieved,

(3) Steps that are being taken or will be taken to bring the system into compliance and the reasons for such steps, and

(4) Legal steps that will be taken by the State to assure that the timetable is followed (the State may refer to information on file with the Administrator).

(e) The Administrator, after considering the report submitted by the State within such time period as specified in paragraph (d), will (1) determine that the State has taken appropriate action or (2) determine that the State has abused its discretion in carrying out primary enforcement responsibility by both:

- (i) Failing to implement by the sixtieth day after the date of notice given under paragraph (a), adequate procedures to bring the system into compliance by the earliest feasible time, and
- (ii) Failing to assure by such day the provision through alternative means of safe drinking water by the earliest feasible time.

§ 142.31 Federal Action.

(a) The Administrator may commence a civil action against a supplier of water whose public water system is not in compliance with a regulation or provision of Part 141 of this chapter or with any schedule or other requirements imposed pursuant to a variance or exemption granted pursuant to Section 1415 or 1416 of the Act:

(1) During a period in which the State in which the system is located does not have primary enforcement responsibility for public water systems.

(2) During a period in which the State in which the system is located has primary enforcement responsibility, if such failure to comply extends beyond the sixtieth day after the date of the notice given pursuant to § 142.30(a), and if

(i) The State fails to submit the report requested by the Administrator as provided by § 142.30(d); or

(ii) The Administrator determines, after considering the report submitted by the State as provided by § 142.30(d), that the State has abused its discretion in carrying out primary enforcement responsibility pursuant to § 142.30(e).

(3) If requested by the chief executive officer of the State in which the system is located or by the agency of such State which has jurisdiction over compliance by public water systems in the State with primary drinking water regulations.

§ 142.32 Petition for Public Hearing.

(a) If the Administrator makes a finding of noncompliance pursuant to § 142.30 with respect to a public water system in a State which has primary enforcement responsibility, the Administrator may, for the purpose of assisting that State in carrying out such responsibility and upon the petition of such State or public water system or persons served

by such system, hold, after appropriate notice, public hearings for the purpose of gathering information as described in § 142.33.

(b) A petition for a public hearing pursuant to paragraph (a) of this section shall be filed with the Administrator and shall include the following information:

(1) The name, address and telephone number of the individual or other entity requesting a hearing.

(2) If the petition is filed by a person other than the State or public water system, a statement that the person is served by the system.

(3) A brief statement of information that the requesting person intends to submit at the requested hearing.

(4) The signature of the individual submitting the petition; or, if the petition is filed on behalf of a State, public water system or other entity, the signature of a responsible official of the State or other entity.

§ 142.33 Public Hearing.

(a) If the Administrator grants the petition for public hearing, he shall give appropriate public notice of such hearing. Such notice shall be by publication in the *FEDERAL REGISTER* and in a newspaper of general circulation or by other appropriate communications media covering the area served by such public water system.

(b) A hearing officer designated by the Administrator shall gather during the public hearing information from technical or other experts, Federal, State, or other public officials, representatives of the public water system, persons served by the system, and other interested persons on:

(1) The ways in which the system can within the earliest feasible time be brought into compliance, and

(2) The means for the maximum feasible protection of the public health during any period in which such system is not in compliance.

(c) On the basis of the hearing and other available information the Administrator shall issue recommendations which shall be sent to the State and public water system and shall be made available to the public and communications media.

§ 142.34 Entry and Inspection of Public Water Systems.

(a) Any supplier of water or other person subject to a national primary drinking water regulation shall, at any time, allow the Administrator, or a designated representative of the Administrator, upon presenting appropriate credentials and a written notice of inspection, to enter any establishment, facility or other property of such supplier or other person to determine whether such supplier or other person has acted or is acting in compliance with the requirements of the Act or Subchapter D of this chapter. Such inspection may include inspection, at reasonable times, of records, files, papers, processes, controls

and facilities, or testing of any feature of a public water system, including its raw water source.

(b) Prior to entry into any establishment, facility or other property within a State which has primary enforcement responsibility, the Administrator shall notify, in writing, the State agency charged with responsibility for safe drinking water of his intention to make such entry and shall include in his notification a statement of reasons for such entry. The Administrator shall, upon a showing by the State agency that such an entry will be detrimental to the administration of the State's program of primary enforcement responsibility, take such showing into consideration in determining whether to make such entry. The Administrator shall in any event offer the State agency the opportunity of having a representative accompany the Administrator or his representative on such entry.

(c) No State agency which receives notice under paragraph (b) may use the information contained in the notice to inform the person whose property is proposed to be entered of the proposed entry; if a State so uses such information, notice to the agency under paragraph (b) is not required for subsequent inspections of public water systems until such time as the Administrator determines that the agency has provided him satisfactory assurances that it will no longer so use information contained in a notice received under paragraph (b).

Subpart E—Variances Issued by the Administrator

§ 142.40 Requirements for a Variance.

(a) The Administrator may grant one or more variances to any public water system within a State that does not have primary enforcement responsibility from any requirement respecting a maximum contaminant level of an applicable national primary drinking water regulation upon a finding that:

(1) Because of characteristics of the raw water sources which are reasonably available to the system, the system cannot meet the requirements respecting the maximum contaminant levels of such drinking water regulations despite application of the best technology, treatment techniques, or other means, which the Administrator finds are generally available (taking costs into consideration); and

(2) The granting of a variance will not result in an unreasonable risk to the health of persons served by the system.

(b) The Administrator may grant one or more variances to any public water system within a State that does not have primary enforcement responsibility from any requirement of a specified treatment technique of an applicable national primary drinking water regulation upon a finding that the public water system applying for the variance has demonstrated that such treatment technique is not necessary to protect the health of per-

sons because of the nature of the raw water source of such system.

§ 142.41 Variance Request.

A supplier of water may request the granting of a variance pursuant to this subpart for a public water system within a State that does not have primary enforcement responsibility by submitting a request for a variance in writing to the Administrator. Suppliers of water may submit a joint request for variances when they seek similar variances under similar circumstances. Any written request for a variance or variances shall include the following information:

(a) The nature and duration of variance requested.

(b) Relevant analytical results of water quality sampling of the system, including results of relevant tests conducted pursuant to the requirements of the national primary drinking water regulations.

(c) For any request made under § 142.40(a):

(1) Explanation in full and evidence of the best available treatment technology and techniques.

(2) Economic and legal factors relevant to ability to comply.

(3) Analytical results of raw water quality relevant to the variance request.

(4) A proposed compliance schedule, including the date each step toward compliance will be achieved. Such schedule shall include as a minimum the following dates:

(i) Date by which arrangement for alternative raw water source or improvement of existing raw water source will be completed.

(ii) Date of initiation of the connection of the alternative raw water source or improvement of existing raw water source.

(iii) Date by which final compliance is to be achieved.

(5) A plan for the provision of safe drinking water in the case of an excessive rise in the contaminant level for which the variance is requested.

(6) A plan for interim control measures during the effective period of variance.

(d) For any request made under § 142.40(b), a statement that the system will perform monitoring and other reasonable requirements prescribed by the Administrator as a condition to the variance.

(e) Other information, if any, believed to be pertinent by the applicant.

(f) Such other information as the Administrator may require.

§ 142.42 Consideration of Variance Request.

(a) The Administrator shall act on any variance request submitted pursuant to § 142.41 within 90 days of receipt of the request.

(b) In his consideration of whether the public water system is unable to comply with a contaminant level required by the national primary drinking

water regulations because of the nature of the raw water source, the Administrator shall consider such factors as the following:

(1) The availability and effectiveness of treatment methods for the contaminant for which the variance is requested.

(2) Cost and other economic considerations such as implementing treatment, improving the quality of the source water or using an alternate source.

(c) In his consideration of whether a public water system should be granted a variance to a required treatment technique because such treatment is unnecessary to protect the public health, the Administrator shall consider such factors as the following:

(1) Quality of the water source including water quality data and pertinent sources of pollution.

(2) Source protection measures employed by the public water system.

§ 142.43 Disposition of a Variance Request.

(a) If the Administrator decides to deny the application for a variance, he shall notify the applicant of his intention to issue a denial. Such notice shall include a statement of reasons for the proposed denial, and shall offer the applicant an opportunity to present, within 30 days of receipt of the notice, additional information or argument to the Administrator. The Administrator shall make a final determination on the request within 30 days after receiving any such additional information or argument. If no additional information or argument is submitted by the applicant the application shall be denied.

(b) If the Administrator proposes to grant a variance request submitted pursuant to § 142.41, he shall notify the applicant of his decision in writing. Such notice shall identify the variance, the facility covered, and shall specify the period of time for which the variance will be effective.

(1) For the type of variance specified in § 142.40(a) such notice shall provide that the variance will be terminated when the system comes into compliance with the applicable regulation, and may be terminated upon a finding by the Administrator that the system has failed to comply with any requirements of a final schedule issued pursuant to § 141.44.

(2) For the type of variance specified in § 142.40(b) such notice shall provide that the variance may be terminated at any time upon a finding that the nature of the raw water source is such that the specified treatment technique for which the variance was granted is necessary to protect the health of persons or upon a finding that the public water system has failed to comply with monitoring and other requirements prescribed by the Administrator as a condition to the granting of the variance.

(c) For a variance specified in § 142.40 (a) (1) the Administrator shall propose a schedule for:

(1) Compliance (including increments of progress) by the public water system with each contaminant level requirement covered by the variance; and,

(2) Implementation by the public water system of such control measures as the Administrator may require for each contaminant covered by the variance.

(d) The proposed schedule for compliance shall specify dates by which steps towards compliance are to be taken, including at the minimum, where applicable:

(1) Date by which arrangement for an alternative raw water source or improvement of existing raw water source will be completed.

(2) Date of initiation of the connection for the alternative raw water source or improvement of the existing raw water source.

(3) Date by which final compliance is to be achieved.

(e) The proposed schedule may, if the public water system has no access to an alternative raw water source, and can effect or anticipate no adequate improvement of the existing raw water source, specify an indefinite time period for compliance until a new and effective treatment technology is developed at which time a new compliance schedule shall be prescribed by the Administrator.

(f) The proposed schedule for implementation of interim control measures during the period of variance shall specify interim treatment techniques, methods and equipment, and dates by which steps toward meeting the interim control measures are to be met.

(g) The schedule shall be prescribed by the Administrator within one year after the granting of the variance, subsequent to provision of opportunity for hearing pursuant to § 142.44.

§ 142.44 Public Hearings on Variances and Schedules.

(a) Before a variance or a schedule proposed by the Administrator pursuant to § 142.43 may take effect, the Administrator shall provide notice and opportunity for public hearing on the variance or schedule. A notice given pursuant to the preceding sentence may cover the granting of more than one variance and a hearing held pursuant to such notice shall include each of the variances covered by the notice.

(b) Public notice of an opportunity for hearing on a variance or schedule shall be circulated in a manner designed to inform interested and potentially interested persons of the proposed variance or schedule, and shall include at least the following:

(1) Posting of a notice in the principal post office of each municipality or area served by the public water system, and publishing of a notice in a newspaper or newspapers of general circulation in the area served by the public water system; and

(2) Mailing of a notice to the agency of the State in which the system is located which is responsible for the State's water supply program, and to other ap-

propriate State or local agencies at the Administrator's discretion.

(3) Such notice shall include a summary of the proposed variance or schedule and shall inform interested persons that they may request a public hearing on the proposed variance or schedule.

(c) Requests for hearing may be submitted by any interested person other than a Federal agency. Frivolous or insubstantial requests for hearing may be denied by the Administrator. Requests must be submitted to the Administrator within 30 days after issuance of the public notices provided for in paragraph (b). Such requests shall include the following information:

(1) The name, address and telephone number of the individual, organization or other entity requesting a hearing;

(2) A brief statement of the interest of the person making the request in the proposed variance or schedule and of information that the requesting person intends to submit at such hearing;

(3) The signature of the individual making the request, or, if the request is made on behalf of an organization or other entity, the signature of a responsible official of the organization or other entity.

(d) The Administrator shall give notice in the manner set forth in paragraph (b) of this section of any hearing to be held pursuant to a request submitted by an interested person or on his own motion. Notice of the hearing shall also be sent to the persons requesting the hearing, if any. Notice of the hearing shall include a statement of the purpose of the hearing, information regarding the time and location for the hearing, and the address and telephone number of an office at which interested persons may obtain further information concerning the hearing. At least one hearing location specified in the public notice shall be within the involved State. Notice of hearing shall be given not less than 15 days prior to the time scheduled for the hearing.

(e) A hearing convened pursuant to paragraph (d) of this section shall be conducted before a hearing officer to be designated by the Administrator. The hearing shall be conducted by the hearing officer in an informal, orderly and expeditious manner. The hearing officer shall have authority to call witnesses, receive oral and written testimony and take such other action as may be necessary to assure the fair and efficient conduct of the hearing. Following the conclusion of the hearing, the hearing officer shall forward the record of the hearing to the Administrator.

(f) The variance or schedule shall become effective 30 days after notice of opportunity for hearing is given pursuant to paragraph (b) if no timely request for hearing is submitted and the Administrator does not determine to hold a public hearing on his own motion.

§ 142.45 Action After Hearing.

Within 30 days after the termination of the public hearing held pursuant to

§142.44, the Administrator shall, taking into consideration information obtained during such hearing and other relevant information, confirm, revise or rescind the proposed variance or schedule.

§ 142.46 Alternative Treatment Techniques.

The Administrator may grant a variance from any treatment technique requirement of a national primary drinking water regulation to a supplier of water, whether or not the public water system for which the variance is requested is located in a State which has primary enforcement responsibility, upon a showing from any person that an alternative treatment technique not included in such requirement is at least as efficient in lowering the level of the contaminant with respect to which such requirements were prescribed. A variance under this paragraph shall be conditioned on the use of the alternative treatment technique which is the basis of the variance.

Subpart F—Exemptions Issued by the Administrator

§ 142.50 Requirements for an Exemption.

The Administrator may exempt any public water system within a State that does not have primary enforcement responsibility from any requirement respecting a maximum contaminant level or any treatment technique requirement, or from both, of an applicable national primary drinking water regulation upon a finding that:

(a) Due to compelling factors (which may include economic factors), the public water system is unable to comply with such contaminant level or treatment technique requirement;

(b) The public water system was in operation on the effective date of such contaminant level or treatment technique requirement; and

(c) The granting of the exemption will not result in an unreasonable risk to health.

§ 142.51 Exemption Request.

A supplier of water may request the granting of an exemption pursuant to this subpart for a public water system within a State that does not have primary enforcement responsibility by submitting a request for exemption in writing to the Administrator. Suppliers of water may submit a joint request for exemptions when they seek similar exemptions under similar circumstances. Any written request for an exemption or exemptions shall include the following information:

(a) The nature and duration of exemption requested.

(b) Relevant analytical results of water quality sampling of the system, including results of relevant tests conducted pursuant to the requirements of the national primary drinking water regulations.

(c) Explanation of the compelling factors such as time or economic factors which prevent such system from achieving compliance.

(d) Other information, if any, believed by the applicant to be pertinent to the application.

(e) A proposed compliance schedule, including the date when each step toward compliance will be achieved.

(f) Such other information as the Administrator may require.

§ 142.52 Consideration of an Exemption Request.

(a) The Administrator shall act on any exemption request submitted pursuant to § 142.51 within 90 days of receipt of the request.

(b) In his consideration of whether the public water system is unable to comply due to compelling factors, the Administrator shall consider such factors as the following:

(1) Construction, installation, or modification of treatment equipment or systems.

(2) The time needed to put into operation a new treatment facility to replace an existing system which is not in compliance.

(3) Economic feasibility of compliance.

§ 142.53 Disposition of an Exemption Request.

(a) If the Administrator decides to deny the application for an exemption, he shall notify the applicant of his intention to issue a denial. Such notice shall include a statement of reasons for the proposed denial, and shall offer the applicant an opportunity to present, within 30 days of receipt of the notice, additional information or argument to the Administrator. The Administrator shall make a final determination on the request within 30 days after receiving any such additional information or argument. If no additional information or argument is submitted by the applicant, the application shall be denied.

(b) If the Administrator grants an exemption request submitted pursuant to § 142.51, he shall notify the applicant of his decision in writing. Such notice shall identify the facility covered, and shall specify the termination date of the exemption. Such notice shall provide that the exemption will be terminated when the system comes into compliance with the applicable regulation, and may be terminated upon a finding by the Administrator that the system has failed to comply with any requirements of a final schedule issued pursuant to § 142.55.

(c) The Administrator shall propose a schedule for:

(1) Compliance (including increments of progress) by the public water system with each contaminant level requirement and treatment technique requirement covered by the exemption; and

(2) Implementation by the public water system of such control measures as the Administrator may require for each contaminant covered by the exemption.

(d) The schedule shall be prescribed by the Administrator within one year after the granting of the exemption, subsequent to provision of opportunity for hearing pursuant to § 142.54.

§ 142.54 Public Hearings on Exemption Schedules.

(a) Before a schedule proposed by the Administrator pursuant to § 142.53 may take effect, the Administrator shall provide notice and opportunity for public hearing on the schedule. A notice given pursuant to the preceding sentence may cover the proposal of more than one such schedule and a hearing held pursuant to such notice shall include each of the schedules covered by the notice.

(b) Public notice of an opportunity for hearing on an exemption schedule shall be circulated in a manner designed to inform interested and potentially interested persons of the proposed schedule, and shall include at least the following:

(1) Posting of a notice in the principal post office of each municipality or area served by the public water system, and publishing of a notice in a newspaper or newspapers of general circulation in the area served by the public water system.

(2) Mailing of a notice to the agency of the State in which the system is located which is responsible for the State's water supply program and to other appropriate State or local agencies at the Administrator's discretion.

(3) Such notices shall include a summary of the proposed schedule and shall inform interested persons that they may request a public hearing on the proposed schedule.

(c) Requests for hearing may be submitted by any interested person other than a Federal agency. Frivolous or insubstantial requests for hearing may be denied by the Administrator. Requests must be submitted to the Administrator within 30 days after issuance of the public notices provided for in paragraph (b). Such requests shall include the following information:

(1) The name, address and telephone number of the individual, organization or other entity requesting a hearing;

(2) A brief statement of the interest of the person making the request in the proposed schedule and of information that the requesting person intends to submit at such hearing; and

(3) The signature of the individual making the request, or, if the request is made on behalf of an organization or other entity, the signature of a responsible official of the organization or other entity.

(d) The Administrator shall give notice in the manner set forth in paragraph

(b) of this section of any hearing to be held pursuant to a request submitted by an interested person or on his own motion. Notice of the hearing shall also be sent to the person requesting the hearing, if any. Notice of the hearing shall include a statement of the purpose of the hearing, information regarding the time and location for the hearing, and the address and telephone number of an office at which interested persons may obtain further information concerning the hearing. At least one hearing location specified in the public notice shall be within

the involved State. Notice of hearing shall be given not less than 5 days prior to the time scheduled for the hearing.

(e) A hearing convened pursuant to paragraph (d) of this section shall be conducted before a hearing officer to be designated by the Administrator. The hearing shall be conducted by the hearing officer in an informal, orderly and expeditious manner. The hearing officer shall have authority to call witnesses, receive oral and written testimony and take such action as may be necessary to assure the fair and efficient conduct of the hearing. Following the conclusion of the hearing, the hearing officer shall forward the record of the hearing to the Administrator.

§ 142.55 Final Schedule.

(a) Within 30 days after the termination of the public hearing pursuant to § 142.54, the Administrator shall, taking into consideration information obtained during such hearing, revise the proposed schedule as necessary and prescribe the final schedule for compliance and interim measures for the public water system granted an exemption under § 142.52.

(b) Such schedule shall require compliance by the public water system with each contaminant level and treatment technique requirement prescribed by:

(1) Interim national primary drinking water regulations pursuant to Part 141 of this chapter, by no later than January 1, 1981; and

(2) Revised national primary drinking water regulations pursuant to Part 141

of this chapter, by no later than seven years after the effective date of such regulations.

(c) If the public water system has entered into an enforceable agreement to become a part of a regional public water system, as determined by the Administrator, such schedule shall require compliance by the public water system with each contaminant level and treatment technique requirement prescribed by:

(1) Interim national primary drinking water regulations pursuant to Part 141 of this chapter, by no later than January 1, 1983; and

(2) Revised national primary drinking water regulations pursuant to Part 141 of this chapter, by no later than nine years after the effective date of such regulations.